

5(amended). Method according to claim 1,
characterized in that the pressure in the CO₂-rich gas stream after the separation unit is
from 1 to 100 bar.

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6(amended). Method according to claim 1,
characterized in that the pressure in the CO₂-rich gas stream after the separation unit is
from 5 to 50 bar.

7(amended). Method according to claim 1,
characterized in that the carbon part in the H₂-rich gas stream is from 1 to 20 % by
volume.

8(amended). Method according to claim 1,
characterized in that the carbon part in the H₂-rich gas stream is from 5 to 15 % by
volume.

9(amended). Method according to claim 1,
characterized in that the natural gas in step a) is supplied with an oxygen rich gas.

10(amended). Method according to claim 1,
characterized in that the natural gas in step a) is supplied with air/oxygen enriched air.

11(amended). Method according to claim 1,
characterized in that the reformer reactor preferably is a partial oxidation reactor.

12(amended). Method according to claim 1,
characterized in that the reformer reactor particularly is an autothermal reformer.

15(amended). Method according to claim 1,
characterized in that the gas stream out of the reformer has a temperature within the
interval from 800 to 1200°C.